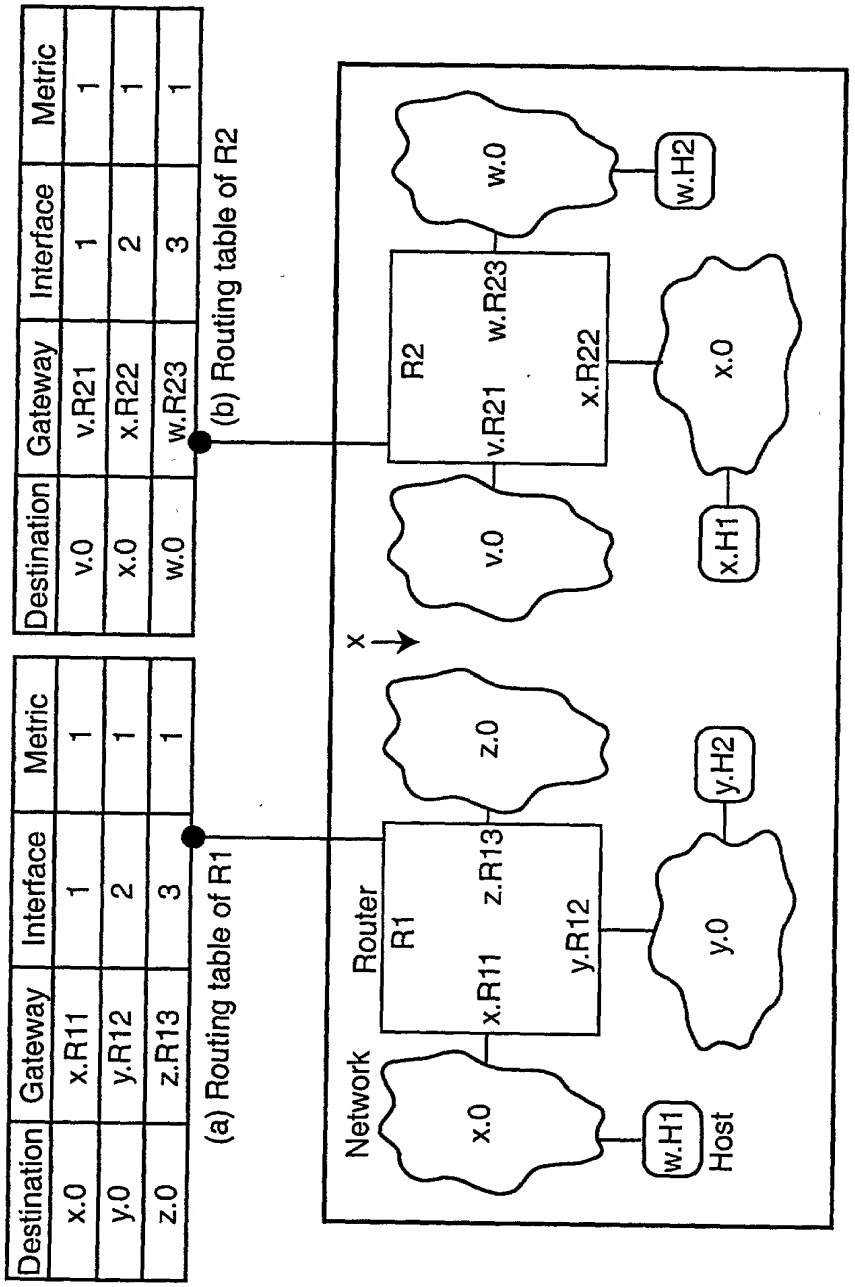
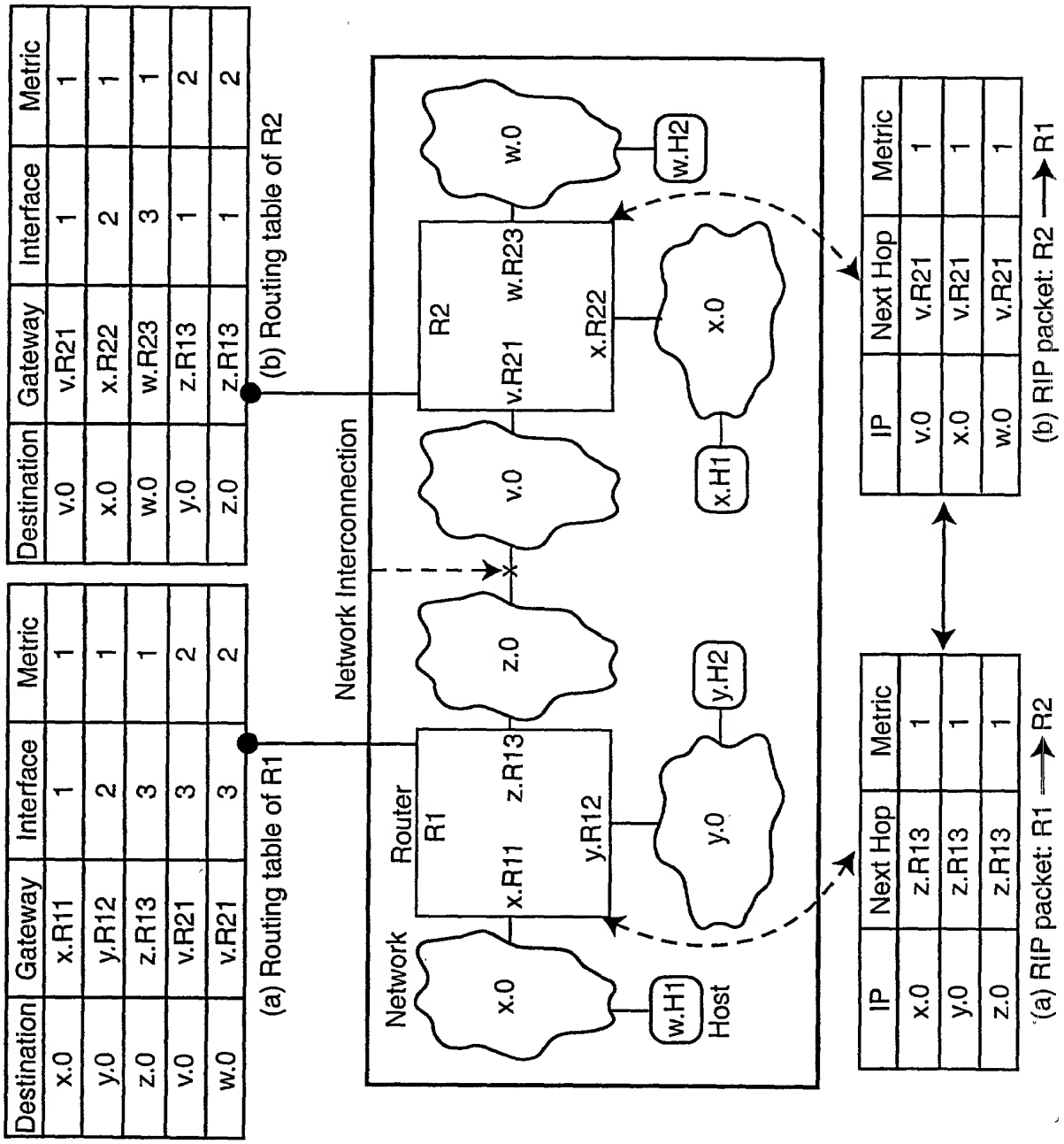


FIG. 1A
Prior Art

FIG. 1B
Prior Art



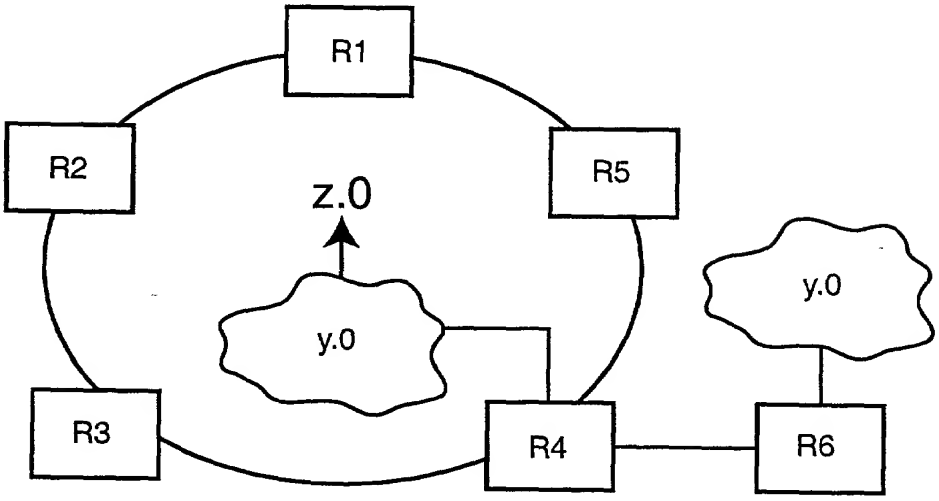

R1
R2
R5
z.0
y.0
y.0
R3
R4
R6

FIG. 2

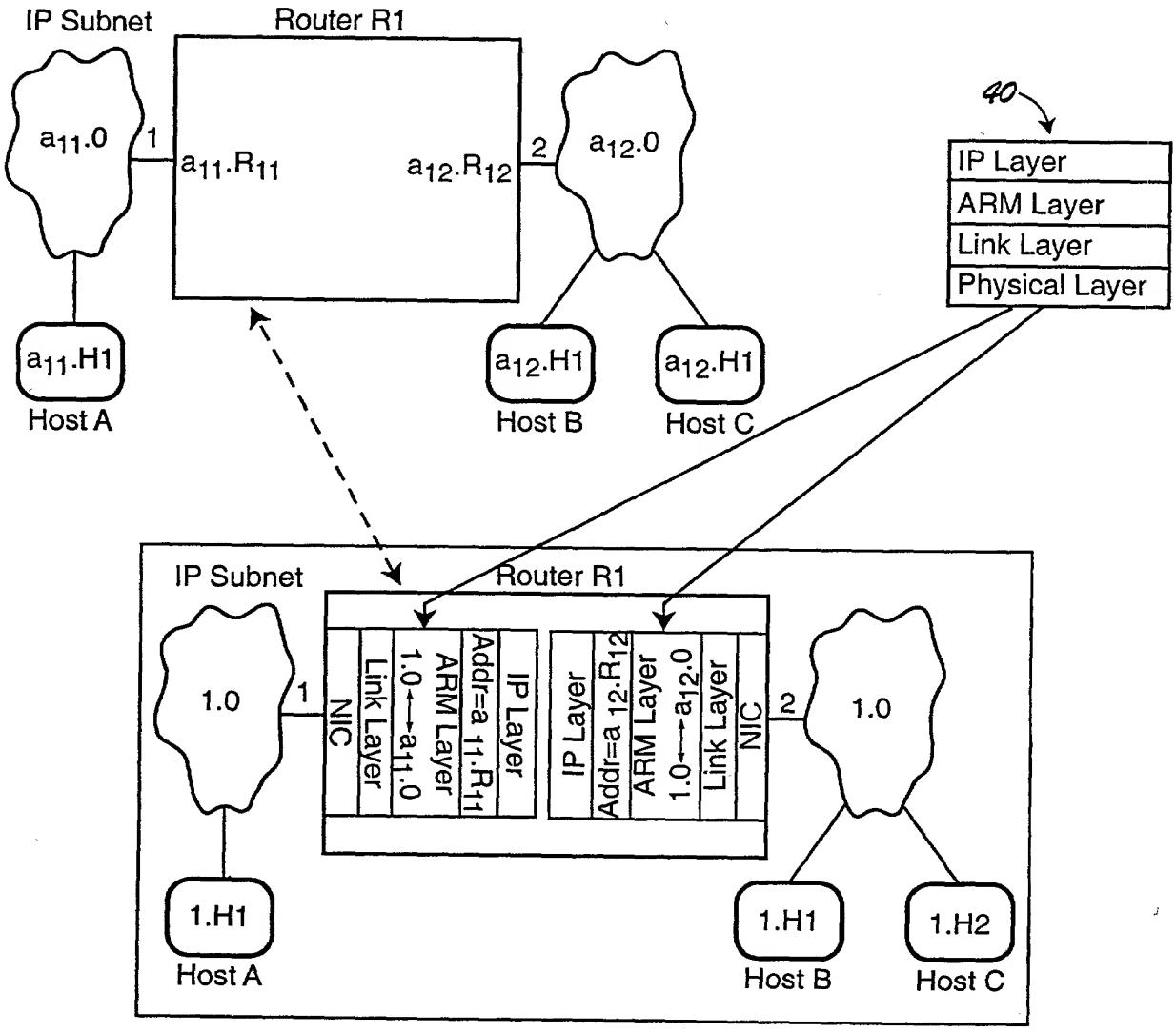

IP Subnet
Router R1
$a_{11}.0$
1
$a_{11}.R_{11}$
$a_{12}.R_{12}$
2
$a_{12}.0$
40
IP Layer
ARM Layer
Link Layer
Physical Layer
$a_{11}.H1$
Host A
$a_{12}.H1$
Host B
$a_{12}.H1$
Host C
IP Subnet
Router R1
1.0
1
NIC
Link Layer
1.0←→$a_{11}.0$
ARM Layer
Addr=$a_{11}.R_{11}$
IP Layer
IP Layer
Addr=$a_{12}.R_{12}$
ARM Layer
1.0←→$a_{12}.0$
Link Layer
NIC
2
1.0
1.H1
Host A
1.H1
Host B
1.H2
Host C

FIG. 3

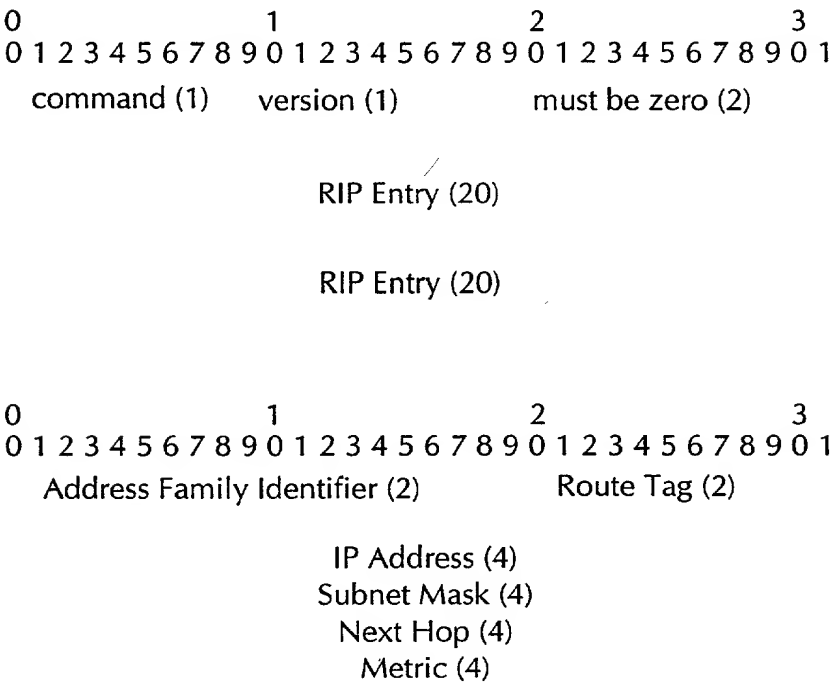

0 1 2 3
0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1
command (1)
version (1)
must be zero (2)
RIP Entry (20)
RIP Entry (20)
0 1 2 3
0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1
Address Family Identifier (2)
Route Tag (2)
IP Address (4)
Subnet Mask (4)
Next Hop (4)
Metric (4)

FIG. 4

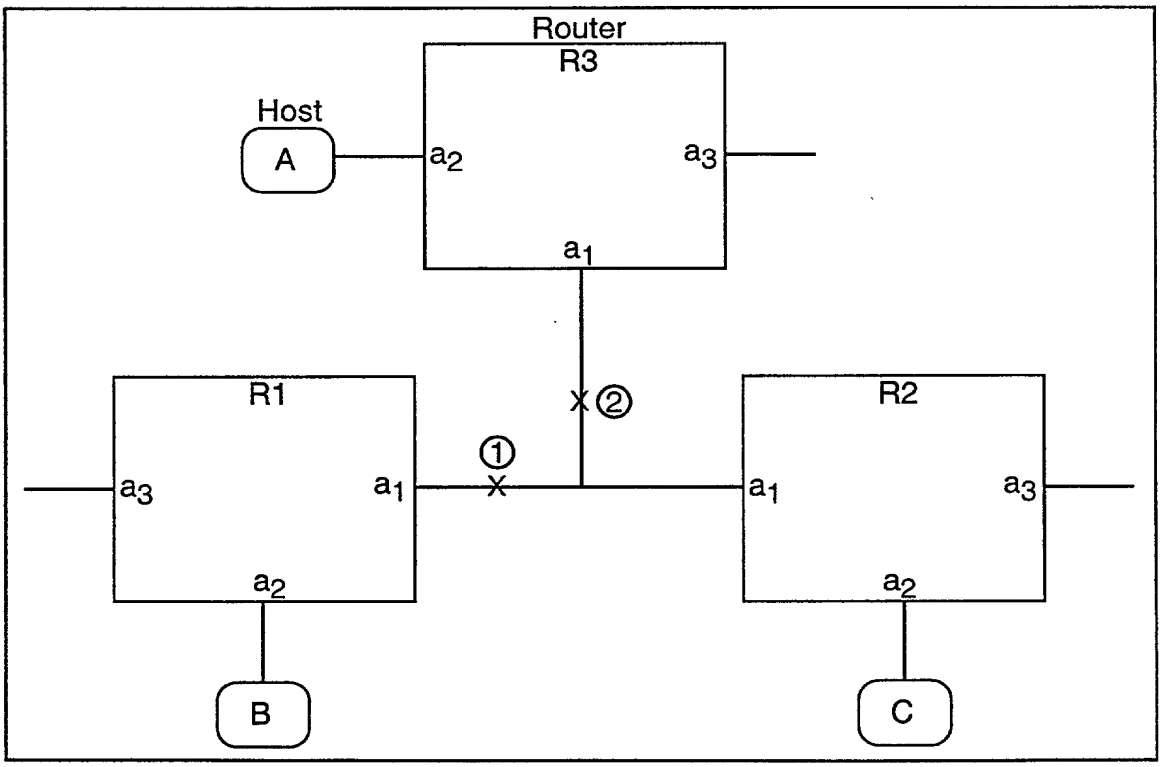

Router
R3
Host
A
a2
a3
a1
R1
R2
X ②
①
X
a3
a1
a1
a3
a2
a2
B
C

FIG. 5

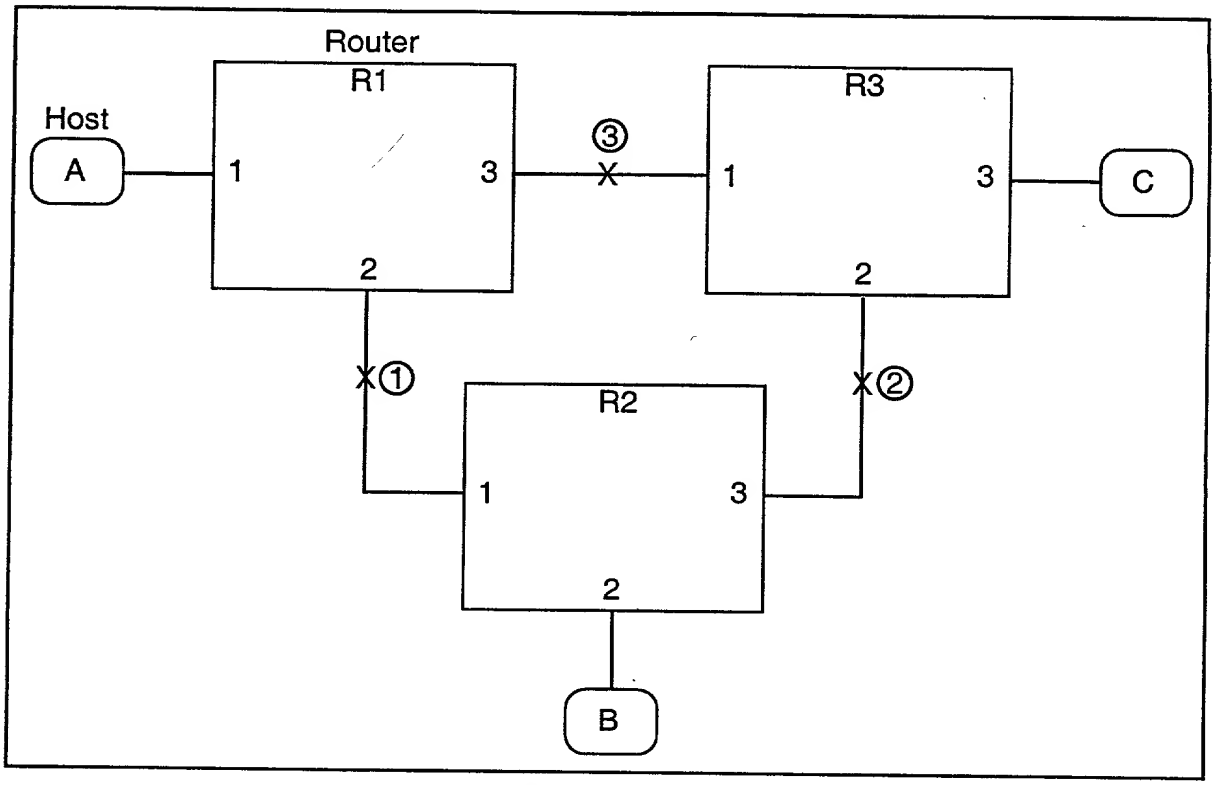

Router
R1
R3
R2
Host
A
B
C
1
2
3
①
②
③

FIG. 6

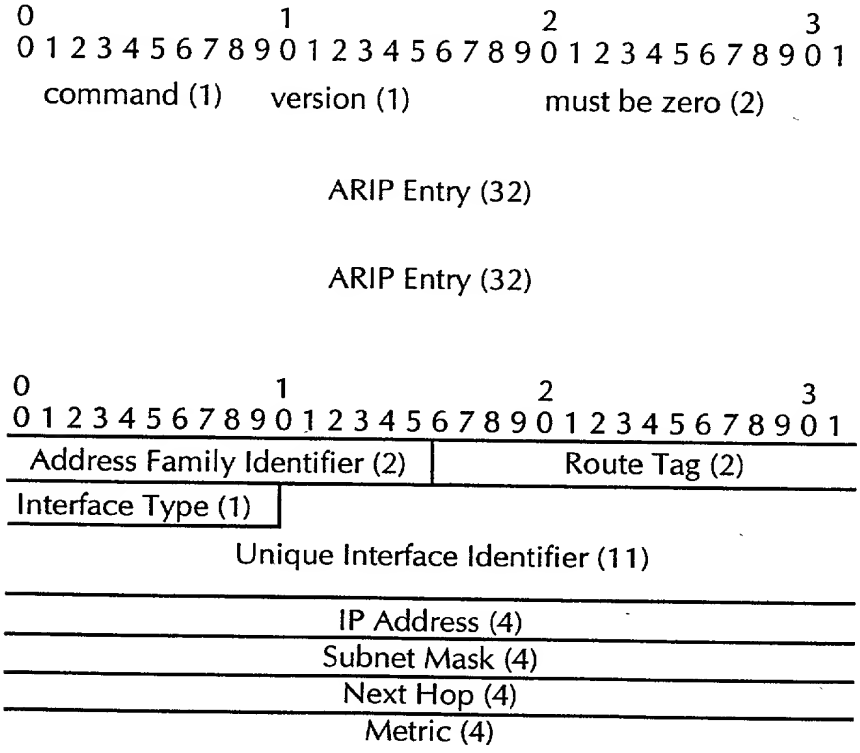

0 1 2 3
0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1
command (1)
version (1)
must be zero (2)
ARIP Entry (32)
ARIP Entry (32)
Address Family Identifier (2)
Route Tag (2)
Interface Type (1)
Unique Interface Identifier (11)
IP Address (4)
Subnet Mask (4)
Next Hop (4)
Metric (4)

FIG. 7